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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/550,416	08/03/2006	Gary Escher	277634US26YA PCT	3185
22850	7590	10/01/2008	EXAMINER	
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			CABRERA, ZOILA E	
			ART UNIT	PAPER NUMBER
			2123	
			NOTIFICATION DATE	DELIVERY MODE
			10/01/2008	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/550,416	<b>Applicant(s)</b> ESCHER ET AL.	
	<b>Examiner</b> Zoila E. Cabrera	<b>Art Unit</b> 2123	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03 April 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9/23/05; 5/12/06; 5/16/06; 10/11/06; 6/25/07</u>              | 6) <input type="checkbox"/> Other: _____                          |
| <u>8/20/07; 9/24/07; 5/27/08</u>   |   |



### DETAILED ACTION

1. Claims 1-25 are presented for consideration.

#### ***Information Disclosure Statement***

2. The IDS filed on July 7, 2008 has not been considered since it was not properly listed on a 1449 Form.

#### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 6-14, and 19-25 are rejected under 35 U.S.C. 102(e) as being anticipated by **O'Donnell et al. (US 7,311,797**, listed in IDS of 5/27/08).

As for claims 1, 6-14 and 19-25, **O'Donnell** discloses:

Claim 1 (Original): A method for adjoining at least two protective barriers on a processing element comprising:

defining a transition region on said processing element, wherein said transition region comprises an overlap of a first protective barrier and a second protective barrier (Col. 5, lines 25-67, i.e., the anodized layer, in addition to the protection provided by the coating, against corrosive attack); applying said first protective barrier to a first region of said processing element, said first region comprising said transition region (Col. 5, lines

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25-67, i.e. the anodized layer); treating a second region of said processing element in order to improve adhesion of said second protective barrier, said second region comprising said transition region (Col. 5, lines 42-55, i.e., grit blasting); and applying said second protective barrier to said second region (Col. 5, lines 25-67, i.e., sprayed yttria-containing coatings; Col. 2, lines 64-67, yttria-containing coating provides an outer surface resistant to chemical and/or physical attack by plasmas).

Claim 6 (Original): The method as recited in claim 1, wherein said first protective layer and said second protective layer comprise **at least one of** a surface anodization, a coating formed using plasma electrolytic oxidation, and a spray coating (Col. 5, lines 25-67).

Claim 7 (Original): The method as recited in claim 1, wherein said first protective layer and said second protective layer comprise **at least one of** alumina, carbon, silicon carbide, silicon, quartz, Teflon, Vespel, and Kapton (Col. 5, lines 55-67 and 25-40; Col. 9, lines 53-67).

Claim 8 (Original): The method as recited in claim 1, wherein said first protective barrier and said second protective barrier comprise **at least one of** a III-column element and a Lanthanum element (Col. 5, lines 25-67, i.e. yttria).

Claim 9 (Currently Amended): The method as recited in claim 1, wherein said first protective barrier and said second protective barrier comprise **at least one** of Yttria (Y<sub>2</sub>O<sub>3</sub>), Sc<sub>2</sub>O<sub>3</sub>, Sc<sub>2</sub>F<sub>3</sub>, YF<sub>3</sub>, La<sub>2</sub>O<sub>3</sub>, CeO<sub>2</sub>, Eu<sub>2</sub>O<sub>3</sub>, and Dy<sub>2</sub>O<sub>3</sub> (Col. 5, lines 25-67).

Claim 10 (Original): The method as recited in claim 1, wherein said first protective barrier comprises a surface anodization, and said second protective barrier comprises a spray coating (Col. 5, lines 25-67).

Claim 11 (Original): The method as recited in claim 1, wherein said treating comprises grit blasting (Col. 5, lines 41-55).

Claim 12 (Original): A processing element for a processing system comprising:  
a first protective barrier coupled to a first region on said processing element; and  
a second protective barrier coupled to a second region on said processing element,  
wherein said first region and said second region overlap to form a transition region (Col. 5, lines 25-67).

Claim 13 (Original): The processing element as recited in claim 12, wherein said second region is treated to improve the adhesion of said second protective barrier (Col. 5, lines 41-55).

Claim 14 (Original): The processing element as recited in claim 13, wherein said treating comprises grit blasting (Col. 5, lines 41-55).

As for claims 19-23, the same citations applied to claims 6-10 above apply as well for these claims.

Claim 24 (Original): The processing element as recited in claim 12, wherein the first and second protective barriers comprise the same material (Col. 10, lines 49-52).

Claim 25 (Original): The processing element as recited in claim 12, wherein the first and second protective barriers comprise different materials (Col. 5, lines 25-67).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 2-5 and 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over **O'Donnell et al. (US 7,311,797)**.

As for claims 2-5 and 15-18, **O'Donnell** discloses the limitations of claims 1 and 12 above but fails to specifically disclose that the transition region comprises at least a portion of an edge; said edge is characterized by at least one edge radius; said edge radius ranges from 0.5 mm to 5 mm; said edge radius ranges from 0.5 mm to 2 mm. At the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to include a portion of an edge having a desired radius because **O'Donnell** discloses a transition region such as the surface of the

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component that is to be coated which can include a portion of an edge with a desired radius (Col. 5, lines 25-67) and applicant has not disclosed that such limitations provides an advantage, is used for a particular purpose, or solves a stated problem.

Therefore, it would have been an obvious matter of design choice to modify **O'Donnell** to obtain the invention as specified in claims 2-5 and 15-18.

### ***Conclusion***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zoila E. Cabrera whose telephone number is 571-272-3738. The examiner can normally be reached on M-F from 8:00 a.m. to 5:30 p.m. EST (every other Friday). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Rodriguez, can be reached on 571-272-3753. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Zoila E. Cabrera/

Primary Examiner, Art Unit 2123